











Maine Manufacturing Extension Partnership

Maine Manufacturing Extension Partnership (Maine MEP) is able to leverage a vast array of public and private resources and services that are available to every manufacturing enterprise in Maine. Maine MEP create opportunities for Maine's small and medium sized manufacturers, by helping them become more efficient, productive and globally competitive. Their experienced project managers will work closely with manufacturers s to identify conditions which may

be impeding their ability to become more efficient, competitive and prosperous. Maine MEP offers an expanding array of Innovation Services and Partnerships to help an enterprise apply new ideas to products, processes and services in the pursuit of profits. If you have a business strategy tied to growth, Maine MEP we will help you determine the best path and resources to succeed.

For more information, contact

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Maine MEP CLIENT IMPACTS

Impacts are based on clients receiving service in FY2012

Total Increased/ **Retained Sales**



\$21.57 Million

Total Increased/ Retained Jobs



New Client Investments



\$5.94 Million

CLIENT SUCCESS: PANTHEON GUITARS LLC

"Maine MEP has been extremely helpful in several ways and has been instrumental in our improvement processes and growing our production by 35% in the last year"

John Karp, CEO

Guitar Manufacturer Strums Up Better Production

Pantheon Guitars is a small high-end guitar manufacturing company who produces the "Bourgeois" brand of guitars. The company is located in the Roy Continental Mill in Lewiston, Maine. They currently employee 13 individuals: ten in the production process and three office workers.

Situation:

Pantheon Guitars, although highly respected for years, lacked a strategic business philosophy or management struture. A few years ago, John Kar, former Maine MEP project manager, long term Maine MEP consultant and two-year consultant to Pantheon Guitars, accepted the position of CEO. Mr. Karp is an Innovation Engineering Blackbelt and an inventor in his own right, who developed a vision for business sustainability and growth for Pantheon Guitars. His new vision includes streamlining the production process to produce seven guitars per week, which will lead to the steady business cash flow that will allow the business to maintain the current level of employment and position the company for growth.

Solution:

Maine MEP, a NIST MEP affiliate, worked with Pantheon's leadership team using lean concepts as a guide to determine the best methodology for their manufacturing processes. This included mapping the value stream to encompass all major steps of their current state. The ultimate end product was to optimize the existing facility with an understanding of what a future process could look like in a new manufacturing space. The overall goal was to eliminate waste and streamline operations. Pantheon Guitar employees participated in the identification of current manufacturing processes and developing the ideal manufacturing environment, resulting in a detailed understanding of each step of the manufacturing process by everyone on the shop floor. The process concluded by developing a spaghetti diagram, showing areas of congestion and long distances traveled. These were then prioritized and a plan of action developed for implementation.

Results:

- * \$700,000 increase in annual sales
- * \$25,000+ cost savings
- * First Pass Yield is up to 95% higher savings, saving \$30,000 annually
- * Increase throughput to nine guitars per week

\$700,000 increase annual sales